CHAPTER – II

REVIEW OF LITERATURE

“Prevention is better than cure”

This chapter deals with research, non-research literature, books, published, unpublished literatures, and journals related to the present study.

According to Polit & Hunger (1991), a review of literature is an essential aspect of scientific research. It involves the systematic identification, location, scrutiny and the summary of the written material that contains information on a research problem. It broadens the researchers’ understandings and to gain an insight, necessary for the development of the broad conceptual context into which the problem fits. A review of literature provides evidence to the researcher about what is already known and what is still unknown and untested by providing useful hypothesis and helpful suggestions for significant investigations.

National and International Journals, web search, Medline, text books were to be studied and referred to have a better understanding on the problem area and to build foundation for the study. The reviewed literature is divided into the following sections:-

Section A

- Magnitude of the population explosion in the world especially in India, its effect on the Nation
- Different Programmes formulated by the Government for Population stabilization
Section B

- Knowledge, attitude and practice of the couples’ to the family planning methods
- Knowledge, Attitude and Practice of the couples’ on Emergency Contraception, Condom, Oral pills, Cu-T & Injectables

Section C

- Need for education programmes on contraceptive methods including emergency contraception.

Section D

- Effectiveness of education programmes on contraceptive methods including Emergency Contraception

Section E

- Effectiveness of Video Assisted Teaching Module programme.

2.1 Section A: Magnitude of the population in the world, especially in India, its effects on Nation

The most important problem of human being in the present day is not infectious diseases but population. The world population now is higher than at any time in its previous history. The main problem is the rate of population increase. Statistics shows that the population of the world was about 1 billion in 1850. Eighty years later, in 1930, the population had doubled (2 billion). Only 46 years after that, in 1976, it had doubled again. Today, it is more than 6 billion. Increase in population has been deemed as the most important socio-economic and cultural phenomenon in recent decades.
Population growth (Carolyn Kinder- the population explosion: causes and consequences 21.2.2009)

- 1850-1 billion
- 1850-1930-80yrs-2 billion
- 1930-1975-45yrs-4 billion
- 1975-1987-12yrs-5 billion
- 1987-2000-15yrs-6 billion

Currently adding 90 million annually and may continue to do so through 2015.

The population of India is likely to be 117.5 cores (India population data 2010) and may exceed 140 cores by 2025. This demographic profile reflects the need to break the various cycles of ever increasing numbers utilizing the limited resources at the earliest. This indirectly shows an unfulfilled need (unmet need) for family planning. India alone has around 29 million women each year adds more people to the world’s population than any other country. The birth rate in India (31 per thousand people) is greater than that of China (20 per thousand people). If this trend continues, India will beat up China by 2025.A.D. (NPP, Govt. of India)

India's population in 1991 and projections to 2016 are as follows -

**Table 2.1 - Population Projections for India (million)**

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<td>846.3</td>
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Stabilizing population is an essential requirement for promoting sustainable development with more equitable distribution. However, it is associated with the
function of making reproductive health care including contraceptive services accessible and affordable for all. Effective control of reproduction can be essential to a woman's ability to achieve her individual goals and to contribute her sense of well-being. A patient's choice of contraceptive method involves factors such as efficacy, safety, non-contraceptive benefits, cost, and personal considerations (NPP 2000).

The ramifications of population increase constitute a serious threat; a country with a population greater than its socio-economic resources would be faced with many problems, both cultural and socio-economic, which in turn would influence its independence. This increase in population affects many aspects of society, including living conditions, basic needs, employment status and the health system. In some places there is no drinking water. People start migrating to cities where they can get some work. People starts fighting for food, water and shelter because of its great effect. So it is essential to have a better understanding for this phenomenon in order to find out some solutions to govern the major factors. Resources are dying out because human needs are increasing day by day. Exploitation of Nature results in global warming (Sinha, 2008).

The results of earlier studies have indicated that in order to have a successful programme in the domain of population control and family planning, beliefs, attitudes, behaviour and the view points of the public regarding reproduction should be taken into account. Practising family planning is influenced by various social, cultural, economic and political factors. Most researches in the family planning and Reproductive Health Services target women, particularly the married women of reproductive age. Consequently, these services, as well as the research, have not addressed to a large number of issues concerning men (Ready, 2003).
Different Programmes formulated by the Government for Population stabilization

In 1952, India was the first country in the world to launch the national programme emphasizing Family planning to the extent necessary for reducing birth rates and to stabilize the population at a level consistent with the requirement of national economy. After 1952, sharp declines in death rates, however, not accompanied by a similar drop in birth rates. The National Health Policy, 2000 stated that replacement levels of Total Fertility Rate (TFR) should be achieved by the year 2010.

- 1951 - programme started
- 1961 - public education and extension
- 1970s - terminal method(target based rigid implementation)
- 1980s - Family Planning changed to Family Welfare
- 1985-86 - UIP
- 1992-93-CSSM programme
- 1996 -Target oriented approach was replaced with target free approach
- 1997- RCH- Phase I
- 2000 - National Population Policy
- 2005-RCH – Phase II (NRHM)

National Population Policy is aimed at reducing maternal mortality & morbidity by achieving universal access to information or counseling and services for fertility regulation and contraception with a wide basket of choices. Since 1960s, the family welfare programme has adopted in theory ‘cafeteria approach’ whereby clients are provided a choice of contraceptive methods. However, it is well documented that,
until recently, the programme emphasis remained skewed towards promoting non-reversible methods, particularly female sterilization (Santhya, 2004)

**Objectives of National Health Policy 2000**

1. The immediate objective is to address the unmet needs for contraception, health care infrastructure and health personnel and to provide integrated service delivery for basic reproductive and child health care.

2. The medium term objective is to bring the TFR to replacement levels by 2010, through vigorous implementation of inter-sectoral operational strategies.

3. The long term objective is to achieve population stability by 2045, at a level with the requirements of sustainable economic growth, social development and environmental protection

In pursuance of these objectives, the following National Socio-Demographic Goals are to be achieved by 2010.

**National Socio-Demographic Goals for 2010**

- Address the unmet needs for basic reproductive and child health services, supplies and infrastructure.
- Reduce infant mortality rate to below 30 per 1000 live births.
- Reduce maternal mortality ratio to below 100 per 100,000 live births.
- Achieve universal access to information / counseling and services for fertility regulation and contraception with a wide basket of choices.

If the NPP 2000 is fully implemented, we anticipate a population of 1107 million (110 cores) in 2010, instead of 1162 million (116 cores) projected by the Technical Group on Population Projections. It is imperative that the reproductive age
group adopts contraception without further delay. Urgent steps are currently being required to make contraception more widely available, accessible, and affordable. Around 74 percent of the populations live in rural areas, in about 5.5 lakh villages, most of which having poor communication and transport. The unmet need for contraceptive services is estimated as 28%.

With 17% of the world's population, India accounts for over 20% of the world's maternal deaths. Population stabilisation is a multisectoral endeavour requiring constant and effective dialogue among a diversity of stakeholders, and coordination at all levels of the government and society. Spreading of literacy and education, increasing availability of affordable reproductive and child health services, convergence of service delivery at village levels, participation of women in the paid work force, together with a steady, equitable improvement in family income, will facilitate early achievement of the socio-demographic goals. Success will be achieved if the Action Plan contained in the NPP 2000 is pursued as a national movement.

2.2 Section B: Knowledge, Attitude and Practice of the couples regarding Contraceptive Practices

Dutt Esther (2010) had conducted a study “To assess the knowledge and attitude of eligible women regarding family planning methods”, shows that 745 of couples had good knowledge and 59% had good attitude towards family planning methods. There is strong association between the ages, type of family of the women with the knowledge.

Donati Serena et al (2010) had conducted a survey on “Knowledge, attitude and practice on family planning in Kakching”, Manipur, reported that attitude of the female towards family planning methods was positive whereas very few husbands
showed positive attitude towards family planning. 90% of females requested more information regarding family planning methods. In addition, 83% were in favour of sex education in school.

**Chopra Seema & Dhaliwal Lakhbir (2009)** conducted a study on “Knowledge, attitude and practice of contraception in urban population of North India”, reported that 55.2% subjects were aware of contraceptive methods and majority of women had favourable attitude towards family planning but awareness of long-acting new methods is still not upto the expected level.

**Foster D.G. et al (2008)** in his article “Cost savings from the provision of specific methods of contraception in a publicly funded programme” reported that all contraceptive methods were cost-effective; they saved more in public expenditures for unintended pregnancies than the cost to provide.

**Sahin N.H. (2008)** in his study “Attitude and Behavior towards male students towards FP” suggested that one-third of them had negative attitudes towards vasectomy and one-fifth of them were against the use of condoms, only 14.5% had heard about EC. He examined that they did not have enough knowledge about EC and other reversible methods. So it is concluded that education and counselling must be offered to all young age groups.

**Fontenat H.B. et al (2008)** in his article “The latest advances in hormonal contraception” quoted that millions of women each year start or continue to use some types of hormonal contraceptive methods. Choosing a method may be anxiety provoking including Injectables, OCP and EC. Nurses can facilitate women’s decision making for healthy reproductive options.
Mao John (2007) in his study on “KAP on Family Planning- a study of Tezu village Manipur” conducted a study to spread the knowledge of FP methods and developing favourable attitude to adopt contraceptive methods among 263 women which revealed a good knowledge and favourable attitude towards FP. Tubectomy was more popular (60%). Awareness to spacing method was only 20% which increased 76% after educating them.

Ahman E. L. et al (2006) in his article “Contraceptive use, fertility and unsafe abortion in developing countries” highlighted that despite of a substantial rise in contraceptive use around the world, unplanned pregnancies and induced abortions continue to occur. Each year an estimated 19 million abortion are carried out outside the legal system, by unskilled practitioners or under unhygienic conditions. High levels of unsafe abortion persists even where contraceptive prevalence is increasing and fertility is declining. He suggested that expanding contraceptive chances and a balanced method-mix can serve as an effective strategy to prevent unsafe abortion and its consequences.

Lamvu G. et al (2006) conducted a study on “Consistency between most important reasons for using contraception and current method used the influence of health care providers”, among 433 women, reported that contact with a health care provider was the only factor associated with consistency between birth control method and reasons for initiating contraception.

Penava D. et al (2006) carried out a study on “Lack of timely access to Tubal Ligation increases risk of unintended pregnancy”, pointed out that being placed on a waiting list for tubal ligation may also lead to an increased risk of unintended pregnancy and the incidence of pregnancy was 1.4 to 17/1000 women.
Kulsoom Kazi (2006) in her study on “Knowledge, Attitude and Practice of family planning” among the women of rural Karachi, showed the result that 80% had knowledge about family planning methods and 40% were the current users of contraceptive methods. She concluded that for the success of the family planning programme, awareness is very essential especially in rural areas where though many women reported being aware of family planning but using of contraceptive rate is still low.

Srivastava Reena (2005) in her study “Contraceptive methods- KAP survey” enumerated that despite of constant efforts of the Govt. unmet need still remain. Most women (82.2%) were aware of Female Sterilization, while half of them were aware of male sterilization. Most of them (82.6%) were willing to use contraceptive methods in future; mainly sterilization. 45.3% of women had no practice of any form of contraception.

Durga Rao P. & Babu Suchakar M (2005) in their study “Knowledge and use of Contraception among Racha Koyas of Andhra Pradesh”, reported that knowledge about contraceptive methods were satisfactory and the acceptance towards the female sterilization was more than the spacing methods.

Sitruk Ware R. (2005) in his study “Delivery options for contraceptives” discussed that though there is a steady increase in contraceptive use has been observed in developed and under-developed countries, the contraceptive needs of significant proportion of couples have not yet been met, resulting in an increase in unplanned pregnancies. He examined that there has been great interest in agents that provide dual protection against pregnancy and STI especially HIV, in recent years, it
might increase motivation for consistent use, thus reducing contraceptive failures and unwanted pregnancies.

*Boulay M. et al (2005)* conducted a study on “The selection of Family Planning discussion partners in Nepal” among 285 married women, aged 15-49 years, showed that both the contraceptive use and attitude towards family planning were positively associated with the addition of a contraceptive user to one’s discussion network, which suggests that women seek contraceptive users to confirm their existing beliefs and behaviour. They observed that social network formation can assist the programme to change for better utility and behaviour.

*Takkar N. et al (2005)* in a cross sectional study on “Contraceptive practices and awareness of Emergency Contraception” among 284 educated working women, stated that, all the subjects were literate and majority (97.2%) had an urban background. Out of 190 married women, 154(81.1%) practised contraception; among them 73.3% were regular users. Eighty respondents underwent abortions of which 46 had spontaneous and 34 had induced abortions. Print and electronic media were the common source of public awareness in 149 subjects (47.7%).

*William H. and Jansen A. (2005)* in their article, “Existing demand for birth spacing in developing countries: perspectives from hold survey data”, pointed out that there was a demand existed among zero parity young married women, suggested that family planning programmes in developing countries may need to re-evaluate.

*Ozumba B. C. et al (2005)* in their study on “Knowledge, Attitude and Practice of modern contraception” among the women in rural and urban community in
South-east Nigeria, reported that contraceptive awareness was much more among the urban than the rural (90.2% vs. 34.1%). Condoms followed by Oral Pills were the most popular methods. The use of contraceptive methods was 32.5% in rural and 59.7% in urban communities. They concluded that there was a need to promote information and education among the women for the acceptance towards family planning methods.

_Schoemaker J. (2005)_ “Contraceptive use among the poor Indonesia” discussed that Indonesia had experienced a dramatic increase in contraceptive use and on equally dramatic fertility decline over the last 30 years. Result elucidated that better of women wanted significantly fewer children than did moderately or extremely poor women (2.85 vs. (3.0-3.4). He concluded that Governmental efforts to the contraceptive use among poor women need to focus on changing in attitudes towards smaller family sizes and family planning.

_WHOL Report (2005)_ suggested that the most important thing is to prevent unwanted pregnancies providing antenatal care and family planning services to improve the health of mother and baby.

_Fisher W. et al (2004)_ “The Canadian Contraception Study” to investigate the contraception and sexual-related awareness, attitudes and practices of 1582 women aged 15 - 44 years using self report survey method, reported that women’s familiarity with pills and condoms as methods of contraception, when comparing with other methods. Sterilization was accepted by 62% of the total sample.

_Khawaja N. P. et al (2004)_ had undertaken a task on survey “Awareness and practices of contraception among 204 married Pakistani women of reproductive age
group attending a tertiary care hospital”. The researchers reported that 68% of the study group had some sort of awareness regarding contraception. Only 47% were using some sort of contraception. The least common method was sterilization (2%). By the above findings, they suggested that to improve contraceptive use, we need to use multi-media sources to educate couples and their parents regarding contraceptive services, which would strengthen the perception and create awareness among women to have their rights and options about the size of family.

*Paz Saldan V. A. (2004)* conducted a study on “How family planning ideas are spread within social groups in rural Malouli” showed the result in connection with the topics under discussion relating to family planning was based on gender and sex. Men spoke about the pros and cons of limiting family size, whereas women spoke in detail about the types of contraceptive methods, where to get them, their side effects and advantages of contraceptives use. Generally, women first hear about family planning at the hospital & men stated that their first source of information was through Radio or Health drama group.

*Cwiak C. et al (2004)* conducted a survey on “Peripartum contraceptives attitudes and practices of women towards contraception”. The survey result shows that over 80% of women were using contraception prior to pregnancy but merely 20% were not satisfied with the method, whose pregnancy was unplanned (36%), over 40% of peripartum women showed a desire to change their contraceptive after delivery. The results indicate that childbirth has a profound effect on contraceptives practices and desires, especially toward long-term methods.

*Santhya K.G. (2004)* reported that India is the only country which shows 84% of contraceptive prevalence whereas use of spacing methods (OCP, Cu-T, Condom)
accounts for 14% of current contraceptive use. Use of male methods was very low (2%).

Alis et al (2004) conducted a study on “Prevalence and factors associated with practices of modern contraceptive methods” among 420 currently married women of reproductive age group of 15 to 49 years in a district, Nausharo Feroze, revealed the result that prevalence of modern contraceptive method was 27.9%. Contraceptive practice was high among the women who were employed, having three or more children and their husbands were educated. By these findings, the researchers suggested that the male and female education and small group discussion of various issues related to family planning and reproductive health may be helpful in creating awareness among the respondents.

Laxmi Murthy (2003) in her article “The population problem: Exploding Myths” describes that ours is of the oldest population programs in the world. She quoted that Indian women, especially from the poor sections, have been consistently subjected to a population reduction program, occasionally garbed in euphemisms like reproductive health, sterilizations accounts for 63% of contraceptive use in India, but significantly women comprise 97.7% of the total number of sterilizations. To reduce the birth rates dramatically, spacing methods have to gain primacy.

Dehre K. L. (2003) in his study on “Knowledge of attitudes towards and practices relating to child spacing methods” in Northern Burkina Faso described that awareness was low for modern contraception and contraceptive prevalence (21%) was very low. The creation of new child-spacing norms and the promotion of modern contraceptive methods are likely to be successful in areas like this one only, if the
population can be sensitized to the idea that Islam does not necessarily discourage contraception.

**Ruth Bessinger et al (2003)** conducted a study on “Fertility level reproductive health interventions and contraceptive use in Uganda”; among 1,766 women of reproductive age by household survey with questionnaire. The result showed that none of the service environment factors was associated with current contraceptive practice and in urban areas the proximity of a private health facility, that is, increased availability of methods were positively associated with current use.

**Saxena N. C. (2003)** in the review article, “Various methods of contraception shall be made accessible to all in India”, pointed out that a total of 55.2% of subjects were aware of contraceptive methods. Permanent methods were known to nearly 50% subjects but acceptance was very less, i.e. 5% only; majority of women had a favourable attitude towards family planning but knowledge of using long-acting new methods is still low, which need to be promoted.

**Wasileh Petra-Nustas (2002)** conducted a study “Men’s attitudes towards contraceptive use” with a qualitative approach among Jordanians and explained that there was knowledge deficit and unfavourable attitude among the men related to contraceptive methods.

**Stan Becker & Elizabeth Costenbuder (2001)** had conducted a study on “Husbands’ and wives’ report of contraceptive use”, quoted that for adaptation of Family Planning Methods, spousal discussion and female education played the main role.
Oona M. R. (2001) conducted a contraceptive survey in Orissa, among 1033 women of age 15-44 years and reported that 11% used the method sterilization. The more educated couples had higher use rates but lower prevalence of sterilization. Information was highly accurate about contraceptive methods.

IIPS (International Institute for Population Sciences)-2000, reported that general awareness of contraception was universal (99%) among currently married reproductive age group of women. However awareness of reversible modern methods was relatively limited among both men and women.

Alice R. (2000) conducted a study on “Knowledge and attitudes about EC in a military population” among 302 active duty military members by survey method. The result showed that there was general lack of knowledge on reproductive issues and the emergency contraception method. Though 85% of respondents were, sexually active, but only 62% used birth control. Only 40% knew when pregnancy was most likely to occur. There is need to educate and create awareness among the couples.

An ICMR task force study (2000) on “Contraceptive knowledge, practices and utilization services in the rural areas in India” indicated that the overall contraceptive prevalence was 45.2%, of which 34.2% had used a permanent method. There was no knowledge of using any family planning method for either postponing the first conception after marriage or spacing between the two childbirths. A large majority of women (70.5%) followed family planning method for the first time, only after completing their desired family size.

The International Conference on Population and Development Programme of Action (ICPD-POA) set an agenda for FP and population programmes to broaden
their approach to meet clients’ need for comprehensive reproductive health care services. After concentrating on coverage many FP programmes had concluded with the result that they had focused on reducing unmet needs for contraception. This indicates that the quality of the services regarding family planning must be improved.

**Knowledge, attitude and practice about emergency contraception**

*Chopra Seema (2010)* conducted a study on “Knowledge, attitude and practice of contraception in urban population” reported that among the samples 13.8% of the subjects had knowledge about emergency contraception whereas none of them had ever used it.

*Mary T. Hickey (2009)* conducted a study among 600 students “To assess the knowledge, perception and use of emergency contraception” and presented that 98% had heard of EC whereas only 28% used it. Researcher recommended that education about EC be warranted, particularly to those who were at risk of reproduction and thus caused population explosion.

*Xuj Cheng L. (2008)* conducted a study on “Awareness and uses of emergency contraception” among 600 pregnant teen agers at Shanghai, with cross sectional survey through face to face interview. The result showed that almost the half i.e. 47.7% had heard of EC but only 8.3% had actually used it. Among the users, 81.6% correspond once to user failure and the other 18.4% to method failure. The researcher thus concluded that both advocacy of EC and the awareness of the risk of unprotected sex should be inculcated through educational programmes.

*Whittaker P.G. et al., (2008)*, conducted a study on “Implementing an advance EC policy: what happens in the real world?” Data collected from 211 mothers help to
derivate the result. Most mothers (80%) said they would use EC and believed that it should be easy to obtain (93%). The author concluded that strategies may facilitate advance provision of EC to include emphasizing and providing patient friendly information and strengthen clinic procedures.

Baldwin S. B. et al (2008) conducted a study on “Who is using EC? Awareness and use of EC” among 11,392 California women and teens, showed that nearly 76% of the respondents had heard of EC whereas about 4% reported by having used the method. The researcher concluded that awareness and use of the method was increasingly important for expanding access.

Moreau C. et al (2008) conducted a study on “The effect of access to EC pills on women’s use”. Among 2863 French women were taken for study, it was found that there were changes in contraceptive behaviours after using EC pills. 41% of women continued to use the highly effective methods.

Frost J. J. et al (2008) conducted a study on “Factors associated with contraceptive choice and inconsistent method use in the United States”, reported that contraceptive choice was associated with a range of socio-economic and partnership characteristics. Researcher pointed out that greater efforts were needed to provide women and their partners with a range of method options, to facilitate selection of methods that best suit their needs.

Cheng L. et al (2008) in their comment stated that Levonorgesterol had provided more effective than yuzpe regimen. The Cu-T & IUD were other effective emergency conceptions to prevent pregnancy after 120 hours of unprotected intercourse.
**Fitter M. et al (2008)** conducted a study on “Awareness about EC: A follow-up report”, among 77 women who attended the clinic, to ascertain whether recent campaigns aimed at increasing awareness and use of EC and reported the result as that 96% of women were familiar with EC, 51% had used EC and 46% had known the correct time limit for effectiveness of EC. They concluded that public awareness campaigns appear to have been effective in increasing awareness and availability of EC.

**Marfie N. et al (2006)** conducted a study on “Awareness of hormonal Emergency Contraception”, among 66 married women, in a Kuwaiti family social network with a cross-sectional survey by self-administered questionnaire. They elucidated that four women (6.1%) had heard of hormonal EC earlier and had used it. Most respondents (65.2%) neither had used nor they had informed to their friends about hormonal EC. The main concerns were risks to the health of the woman (83.3%) or the baby (54.4%) or that it was abortifacient (21.7%). However, 90.9% of respondents wanted hormonal emergency contraception to be available at once. They concluded that awareness of hormonal EC is low among Kuwati women. In spite of some concerns, they feel it should be made available. Health care providers and policy makers should address this situation.

**Lakartidningen Marions L. et al (2005)** in the article -“Emergency oral contraceptives do not interrupt pregnancy, women withhold the treatment which is erroneously placed on a par with abortions” discussed that Emergency Contraception (EC), which prevents pregnancy after unprotected sexual intercourse, has the potential to significantly reduce the incidence of unintended pregnancy and thus the need for abortion. The main mechanism of action of Emergency Contraceptive pill is
to postpone or inhibit ovulation, while the insertion of a copper IUD prevents implantation.

**Chreng L. et al (2005)** had given comments on “Intervention for emergency contraception (EC)”, EC was largely underutilized worldwide. In many developing countries, lack of access to EC may subject women to unsafe abortions, which contribute significantly to maternal mortality and morbidity. The Yuzpe regimen could be used if Levonorgestrel or Mifepristone is not available. The intra uterine device (IUD) is another effective emergency contraceptive, and can be kept as an ongoing contraception.

**Srivastava Reena (2005)** in her study “Contraceptive - KAP survey” at Gorakpur, showed that the awareness towards EC was only 1.1% and none had used it but 4.7% intended to use in future.

**Takkar N. et al (2005)** in “Contraceptive practices and awareness of Emergency Contraception” among 284 educated working women with a cross sectional study design, showed that 29(11.2%) women were aware about emergency contraception, whereas only three women had used it. A high percentage of females in the literate working women population used contraception, but on the other hand awareness of EC was low.

**Conarel L. A. et al (2004)** in “Emergency contraceptive pills: a review study”, focused that though the samples had greater awareness and more access to emergency contraception, there were still numerous barriers to its use; even in the countries where it is available in the counter. Health care providers must continue to educate themselves and their patients about emergency contraception. In countries where
emergency contraception is only available by prescription, providers should offer an advance prescription of supply (where available) and use newer regimens for Levenorgestrel only, EC to increase adherence and efficiency. Developing collaborative practice an agreement with pharmacists is also necessary to increase access has also been recommended.

Weismiller D. G. (2004) in his “Comment on EC”, quoted that EC is effective about 75% to 85%. It is the most effective when initiated within 72 hours after unprotected intercourse. He recommended that to offer an advance prescription of EC to patients on their regular gynecologic visit could help to reduce unwanted pregnancies. Advance provision of EC can increase its use significantly without adversely affecting the use of routine contraception.

Fisher W. et al (2004) “The Canadian Contraception Study” among 1582 women between 15 to 44 years of age group, by using self report survey method, showed that the knowledge of morning after pill was 57%.

Heimburger A. et al (2003) in their article; “Expanding access to EC; the case of Brazil and Colombia” suggested that as EC prevented unintended pregnancy and it was a back up method of contraception, hence it should be available and accessible to all reproductive age group couples and in clinics where they visited whenever the need arises.

Saxena N. C. (2003) in the review article, various methods of contraception shall be made accessible to all eligible in India. He quoted that 13.8% subjects were aware of emergency contraception whereas none of them used it.
O’ Callaghan M. A. et al (2001) in his article “The next step for emergency contraception over the counter availability”, quoted that emergency contraception to prevent pregnancy after episodes of unprotected sexual intercourse has existed since 1960s. Researchers suggested that the effectiveness of emergency contraceptive pills relies heavily on prompt administration, better access to a patient is essential.

Kettyle E. P., Klima C. (2002) carried out a study on “Adolescent Emergency contraception; attitudes and practices of certified nurse-midwives”, discussed that though EC have been well documented in US, it is dramatically underused because of lack of knowledge as well as misinformation on the part of health care providers. They suggested that midwives play a significant role in the provision of reproductive health care and their attitude about the use of EC may create impact in the availability of EC to the clients.

Shaowe J. et al (2001) conducted a study on “Emergency Contraception: Who are the users?” among women of aged 14-44 years attending clinic for EC by descriptive design. The result shows that 97.7% women attended the clinic within 72 hours for issuing oral EC, however only 4% came within 12 hours of Intercourse. 55% said that they had used contraception but the condom breakage was the commonest reason for failure. 55.6% were previous users of Emergency Contraception.

Bamnezai Geeta (2001) “Impact of counselling service in family planning-An assessment of counselling services in Delhi CGHS hospital”, presented that about 60% of counselled couples had correct knowledge on modern contraceptives compared to 48% of non-counsellled.
Alice R. (2000) conducted a study on “Knowledge and attitudes about EC in a military population” among 302 active duty military members by the survey method. The result shows that 64% of the respondents had heard of EC, but among them only 15% were aware of the correct time to take it. 55% of the samples said, that they would use EC if needed; they concluded that knowledge deficit must be addressed to keep women deployable. Educational materials and EC kits should be standard issue items that might prevent unwanted pregnancies and produce significant savings in reproductive health and emotional costs.

Caroline Free et al (2000) conducted a study on “Young Women’s account of factors influencing their uses and non-uses of EC” among 30 women aged 16-25 years. The result shows that Young women’s accounts of their non-use of EC principally concerned evaluations of the risk conferred by different contraceptive behaviours, their evaluation of themselves in needing emergency contraception, and personal difficulties in asking for EC. They concluded that the attitudes & concerns of young women especially those from disadvantaged backgrounds, may make them less able or willing than others to take advantage of recent increase in access to EC. There is an aim to increase the use of EC need to address the factors that influence young women’s non-use of EC.

Cheng L. et al (2000) in their article “Interventions for emergency contraception” quoted that it is the most effective, safe and convenient for using and preventing unwanted pregnancies. The result shows that Levonorgesterol appears to be more effective than Yuzpe regimen (95%) and causes fewer side effects.

La Vallaer J. (2000) in his article “The time has come for EC” narrated that it is highly underused worldwide. The patient as well as the physician’s awareness
remains low. There are several highly effective well tolerated methods that can be used to prevent undesired pregnancy after unprotected intercourse.

**Glasier A. (2000)** in his article “Emergency contraception” wrote that knowledge and use of EC worldwide is extremely limited. Accessibility to EC is limited as the requirement for it to be prescribed by a doctor. Advance provision of EC may prevent a significant number of unwanted pregnancies.

**Sorensen M. B. et al., (2000)** conducted a study on “Difference between users and non-users of EC after a recognized unprotected intercourse” among 217 women. The result shows that 139(64%) were aware of pregnancy risk but only 9(4%) had used EC after unprotected intercourse, 42% were estimated to have sufficient Knowledge of the use of hormonal EC. EC users were older, better educated. Neglect of risk after an unprotected intercourse is frequent in younger well-informed women. They concluded that information has to be better targeted and reach the public.

**Quinns (2000)** in her article on “EC implications for nursing produce public and nurses alike” outlines the information about the method of post coital contraception that all nurses need to provide appropriate health advice to women in any nursing setting.

**Knowledge, attitude and practice on Condom**

**Chopra Seema (2010)** conducted a study on “Knowledge, attitude and practice of contraception in urban population”, reported that among the samples mostly (52.7%) acquired knowledge about barrier method whereas 31.7% of the respondents used it.
Donati Serena (2010) reported that knowledge on condom was 20% but none of them used the method.

Kulsoom Kazi (2006) in her study reported that knowledge on condom method was 30.6% but none of them used it. It shows that males were not preferred to use the method.

Sabaratnam Arulkumaran (2005) conducted a study in Bangladesh, said that condom is more popular and easily available method. Use of male condom should be encouraged as a second protection towards pregnancy but most important is to minimize sexually transmitted diseases.

Lynna A. Littleton (2005) condom is inexpensive and readily available. It requires no contact with the health care system, and when used properly they are quite effective as a method of contraception.

Takkar N. et al (2005) reported that 89 (57.8%) samples had been following condom method of contraception.

Srivastava Reena (2005) in her study “Contraceptive- KAP survey” at Gorakpur showed that the awareness towards condom was only 53.7% and the most common method ever used by the couples (34.5%).


hospital” highlighted the result that the most common method chosen by the respondents was the barrier method (15%).

_Hassan Nurfadzillah (2004)_ reported in his study that 84.2% of the couples had knowledge on condom whereas it was used only by 8.2% of couples.

_Eisenberg M. E. et al (2004)_ in their study “On parent’s beliefs about condom and oral pills; are they medically accurate?” and reported that parents had underestimated the effectiveness of condoms for preventing pregnancy and STDs. Only 47% believed that condoms are very effective for STDs prevention and 40% believed that it was very effective for prevention of pregnancy.

_Saxena N. C. (2003)_ in the review article, “Various methods of contraception shall be made accessible to all” in Indoor, India. He elucidated that most of the couples (52.7%) were aware of barrier methods of contraception but it was only used by 31.7% of couples.

_Ready Rajesh (2003)_ conducted a study on “Rapid appraisal on men’s knowledge, attitude regarding contraceptive methods” in Pondicherry, reported that among the respondents the most popular (54%) method was condom, whereas only 4.2% were used it.

_Mine Y. & Gulsen V. (2002)_ in their study on “Reason for using traditional contraceptive methods and the role of the nurse in family planning” indicated that condom was used by 25% of the respondents.

_Oona M. R. (2001)_ conducted a contraceptive survey at Orissa among 1033 women aged 15-44yrs reported that the most commonly used method by the respondents was condom(24%).
**Bamnezai Geeta (2001)** “Impact of counselling service in Family Planning—An assessment of counselling services in Delhi CGHS hospital” reported that regarding condom, 95% (counselling) couples had knowledge as compared 90% among the non-counselling.

**Knowledge, attitude and practice on Oral Pills**

**Chopra Seema (2010)** conducted a study on “knowledge, attitude and practice of contraception in urban population” reported that among the samples 43.2% of the subjects had knowledge about OCP contraception whereas 3.3% only used it.

**Donati Serena (2010)** in her study on “knowledge, attitude and practice of couples about contraceptive methods”, reported that knowledge on OCP was 44% and it was one of the common methods that couples used.

**Kulsoom Kazi (2006)** in her study on “knowledge, attitude and practice of women about contraceptive methods” reported that 45.83% of the couples were used oral pills.

**Lete I. et al (2008)** in their article on “Self-described impact of non-compliance among users of combined hormonal contraceptive methods” pointed out that 65% of women used pills. EC was requested by 14% of pill users.

**Nelson A. L. et al (2008)** conducted a study on “Real world patterns of prescription refills for brand hormonal contraceptives: a reflection of contraceptive discontinuation”, reported that only 1% of women refilled their prescriptions indicates that few women had the potential for correct and consistent contraceptive use. These
high rates of discontinuation rates suggest that barriers to successful utilization of
contraceptives still exist.

*Park K. (2007)* enumerates that in the Govt of India two pills were available, Mala N and Mala D. Mala D contains 28 pills (21 of OCP and 7 ferrous fumarate pills)

*Srivastava Reena (2005)* in her study on “Contraceptive- KAP survey” reported that among the couples 60.5% were aware about OCP, whereas 18.9% were using it.

*Ramakant Sharma (2005)* conducted a study on “The pill - to use or not?” to access the reason of acceptance, discontinuance, knowledge, motivation, communication and service perspective of pill among 500 women in Rajasthan shows the result that 98% women know about the pill and 29.7% are motivated by the Govt. health workers. But 65% were not informed about probable side effects of use of Pill. Lack of reliable information and side effects related with the use of oral pills appear to be the major factors in limiting the use of pills. It would be more reasonable to give women an accurate picture of the benefits & side effects of the pills at initial stage. Eligible users who do not use pills should be identified in each village and they should be effectively educated and motivated through integrated intensive companions. Regular home visitors can create a conducive situation for the practice of the pills. He suggested that proper and timely accessibility, supply and follow up by health workers can increase the regular use of pills and minimize the rate of discontinuance.

*Takkar N. et al (2005)* “Contraceptive practices and awareness of Emergency Contraception among 284 educated working women with a cross sectional study
design shows that the use of hormonal contraception was very low, only 26% of samples were using the pills.

**Jancie D. Smith, Deborah Oakley (2005)** “Why do women miss OCP? An analysis of women’s self described reasons for missing pills” presented that inconsistent use of oral pill contraceptives exposes women to miss the pill.

**Durga Rao P. & Babu Sudhakar M. (2005)** study on “Knowledge, and use of contraception among Racha Koyas”, reported that 13.5% of the respondents were using oral pills as the method of contraception.

**Eisenberg M. E. et al (2004)** in their study on “Parent’s beliefs about condom and oral pills: are they medically accurate?” Reported that 52% of the respondents thought that using of pills prevent pregnancy and 39% among them thought that Pill is very safe.

**Fishe W. et al (2004)** “The Canadian Contraception Study” among 1582 women aged 15 to 44 years using self-report survey method, shows that 96% of respondents were using oral contraceptives.

**Khawaja N. P. et al (2004)** “Awareness and practices of contraception among 204 married Pakistani women of reproductive age group attending a tertiary care hospital” highlighted the result that majority of the sample had knowledge about the Pill (68%).

**Ready Rajesh (2003)** conducted a study on “Rapid appraisal on men’s knowledge, attitude about contraceptive methods” at Pondicherry, reported that all of
them aware of contraceptive methods whereas users of oral pills was very low (3.3%) due to fear of side effects.

*Saxena N. C. (2003)* in the review article, various methods of contraception shall be made accessible to all in India, quoted that 43.2% were aware of OCP whereas only 3.3% were using it.

*Oona M. R. (2001)* conducted a Contraceptive survey in Orissa among 1033 women aged 15-44yrs reported that 29% of the respondents were using oral pills whereas misconception of the cancer and infertility risks from pills were common.

**Knowledge, attitude and practice on Cu-T**

*Chopra Seema (2010)* conducted a study on “knowledge, attitude and practice of contraception in urban population”, reported that among the samples 46.1% of the subjects had knowledge about Cu-T whereas 10.3% respondents used it.

*Donati Serena (2010)* reported that knowledge on Cu-T was 72% and it was the most frequent in use method.

*Stubbs E. & Schamp A. (2008)* in the evidence based study, “Why are IUDs still out? Physicians perception to side effects”, reported that the side effects of IUDs are severe than is supported by the clinical guidelines and were misinformed about the range of the women who could benefit from IUDs, which contribute to lower acceptance rate to IUDs.

*Kulsoom Kazi (2006)* in her study “Knowledge, attitude and practice of women about contraceptive methods” reported that knowledge on Cu-T method was 73.4% whereas this method used only by 23.61% of couples.
Durga Rao P. and Babu Sudhakar M. (2005) study on “Knowledge, and use of contraception among Rachā Koyas”, reported that 5.8% of the respondents were using CuT method of contraception.

Srivastava Reena et al (2005) in her study “Contraceptive-knowledge, attitude practice survey” of couples contraceptive method, reported that most known(61.2%) temporary method of contraception was IUD among the samples of study whereas 20.3% were willing to adopt this method in future.

Takkar N. et al (2005) “Contraceptive practices and awareness of Emergency Contraception” among 284 educated working women with a cross sectional study design, shows the result as 38 women (24.7%) were using CU-T as a method to prevent pregnancy.

Gupta S. & Miller J. E. (2005) said that Cu-T is a frameless, copper bearing device. It consists of a knotted, polyproline thread with six copper sleeves. The device is anchored in the uterus by inserting the knot into the uterine fundus.


Khawaja N. P. et al (2004) “Awareness and practices of contraception among 204 married Pakistani women of reproductive age group attending a tertiary care hospital” stated 55% of them had the knowledge of Intra Uterine Devices (IUD) and it was practised only by 10 % of the samples.

Hasan Nurfadzillah (2004) reported in his study that 7.2% of the couples were using Cu-T in that study area.
Cwiak C. et al (2004) conducted a study on “Peripartum contraceptives attitudes and practices of women towards contraception” by survey. The result shows that 65% of women had received only limited information about IUD.

Ready Rajesh (2003) conducted a study on “Rapid appraisal on men’s knowledge, attitude on contraceptive methods”, reported that among the respondents, 7.4% of couples used Cu-T.

Saxena N. C. (2003) in the review article, “Various methods of contraception shall be made accessible to all in India”, quoted that knowledge on Cu-T was 46.1% while it was used by only 10.3% of couples.

Mine Y. Gulsen V. (2002) in their study on “Reason for using traditional contraceptive methods and the role of the nurse in family planning” reported that the most commonly used method among the respondents was Cu-T (22.8%)

Oona M. R. (2001) conducted a Contraceptive survey in Orissa among 1033 women aged 15-44yrs reported that 21% of the respondents were using Cu-T as contraceptive method.

Bamnezai Geeta (2001) “Impact of counselling service in Family Planning-An assessment of counselling services in Delhi CGHS hospital” showed that among counselled 27% had used Cu-T whereas among the non-counsellled only 13% used the same.

Knowledge, attitude and practice on Injectables

Donati Serena (2010) reported that knowledge on Injectables contraception was only 1% and none of them used the method.
**Kulsoom Kazi (2006)** in her study reported that knowledge on Injectables contraception method was 62.4% and it was used by 15.28% of couples.

**Fisher W. et al (2004)** “The Canadian Contraception Study” among 1582 women aged 15 to 44 years, using self-report survey method; result shows that depot (Injectables) method practiced by 38% of study samples.

**Laxmi Murthy (2003)** in her article “The population problem; Exploding myths” with one of the oldest population programmes in the world, quoted that long acting contraceptives like Injectables are ideal because they are provider-centered. Women need not be relied upon to remember taking the pill, or keep the IUDs in place and need not be persuaded to use condoms.

From a policy-makers perspective, “Long acting hormonal contraceptives like Injectables (Net EN & Depoprovera) & implants like Norplant are ideal “because they are provider controlled. The promotions of long-acting hazardous contraceptives are justified on the plea that birth rates have to be brought down in a hurry. The price that women pay with their health is irrelevant and unwanted.

**Douglas Huber (2002)** conducted a survey in Bangladesh “to assess the level of contraceptive practices among the couples” found the result that only 1% of women used any type of contraception. But after education, counselling and follow-up services the total contraceptive prevalence rate increased from 1% to 22 % then to 74% of which practice towards Injectable was more than 30%. The high acceptance rate was the direct result of our early strategy for better dealing with side effects.
2.3 Section C: Need of Education on contraceptive methods

Kore S. et al (2009) conducted a study on “Knowledge and attitude of the women on contraceptive methods”, reported that attitude of the samples were good and their level of education, number of pregnancy, having information about contraceptive method had influenced the attitude. With the above findings they suggested that education programmes and consultancy services must be planned and implemented.

Cooper, Richard J. et al (2008) carried out a study on “Ethical, religious and factual beliefs about the supply of emergency contraception by UK community pharmacists” and stated that pharmacists’ ethical views and misunderstanding about emergency hormonal contraception perpetuated lay beliefs and potentially threatened correct advice and prompt availability of emergency hormonal contraception, may also lead to variable supply and confusion amongst women. They suggested that training is needed to clarify both factual and terminological misunderstandings about emergency hormonal contraception and to develop pharmacists’ ethical understanding and responsibility.

Suneeta Mittal (2007) conducted a study on “Contraceptive Knowledge and use: A survey of New Delhi”. Among two thousand women of reproductive age were interviewed regarding their contraceptive behaviour. Of the married women participating in the survey, very few used any form of contraceptive for first two years of marriage or immediately postpartum. However, the majority (99%) agreed that spacing of children was essential, 55% believed that the ideal time interval between children was 3 to 5 years. Only 6% of women were aware of Emergency Contraception (EC). Education with patience is the key to overcoming many of the hindrances to EC.
Editors’ comment: This medium sized survey of contraceptive practices among rural and urban in the North India highlights a lack of awareness of EC and consequently the need to impart greater information on this subject. This being the case of present, opportunity is taken to discuss in more detail about emergency contraception and its roles.

Mehera Reeti et al (2007) conducted a study on “Knowledge of EC among 100 women with reproductive age coming for induced abortion” shows the result that only 27% of women were using regular contraception. Condoms were the most popular choice in 75% of all users. Only one woman out of 100 was aware of EC even though it was a predominantly urban and educated population. They suggested that in India, EC is much under publicized and underused. Efforts should be made to promote information, education & communication regarding EC, targeting all women of reproductive age group.

Olufance Margaret Ebuehi et al (2006) had undertaken a study on “Health care providers, Knowledge, Attitudes towards & provision of EC in Nigeria” among 256 health care providers by self-administered questionnaire. The result shows 87% providers had heard of EC, but many lacked specific knowledge about the method. Only half of them knew the correct period for effective use of EC pills. 3/4th knew that the pills prevent pregnancy; more than a third incorrectly believed that they may act as an abortifacient. 58% had provided clients of EC pills, yet only 10% of these providers could correctly identify the drug dose and timing. They recommended that health care providers urgently need carry out effective educational interventions about emergency contraception; training programmes should target the types of providers who are less knowledgeable about the method.
Javid A. Choudhury (2006) “Developing an appropriate health care system: An Indian overview” explained, regarding population stabilization thus; “It is a major area of concern in the health sector with wide implication for overall development of the burgeoning population. The country faces a huge challenge because of the demographic profile of its existing population. The percentage of the population estimated to be in the reproductive age group is in excess of 58%. 45% of the increase in population is through children with a birth order of 3 and above. In this backdrop, the effort towards population stabilization will have to rely on bringing about a behavioral change, so that couples are self-motivated to plan for small families. Looking to current demographic profile, a massive effort would be required to achieve the targets set under national population policy – 2007 that aims to bring down the total fertility rate to replacement level (2.1) by the year 2010 and to achieve a stable population by year2045.

Oye-Adeniron B. A. et al (2005) conducted a study on “Sources of contraceptives, commodities for users in Nigeria” by multi stage random sampling of 2001 samples aged 15-49 years. They discussed the result that out of 2001 1647(87.3%) were sexually active, out of which 244 were found to be using contraceptive methods at the time of study, giving a contraceptive prevalence of 14.8%. The commonest source of information on contraceptive was through friends (34%) followed by radio (11.5%) & husband (10.2%). Most of the respondents procured their contraceptives from medicine shops (9.7%), while only 0.8% obtained from family planning clinics. They suggested that strategies to increase contraceptive use must be taken into consideration and these identified sources of contraceptives with a view to enhancing the quality, quantity and variety of methods available, and to building capacity for effective service delivery. There is also a need to encourage the
establishment of clinics for counselling and obtain contraceptives of their choice including emergency contraceptive pills.

**Yours E. F. R. M. (2005)** “Contraception use and probability of continuation: Community based survey of women in southern Jordan” among 1109 participants. The result shows that, 61% were ever users of contraceptives older age, longer duration of marriage, large number of surviving children and use of IUD independently predicted a larger duration of contraception use, pregnancy planning (74%) was the most frequently stated reason for discontinuation. He suggested that family planning programmes should be focused on reducing discontinuation and recommending methods should be with a higher probability of continuation.

**Banerjee N. et al (2005)** “Factors determining the occurrence of unwanted pregnancy” among women seeking medical terminating of pregnancy,” study result showed that husband’s unwillingness for contraception and the improper use of condoms were responsible for 1/3rd of unwanted pregnancies. Lactation was believed to be a protection against pregnancy by 11.3% of women while 6.3% were of choice of any contraceptive method. They recommended that focusing on these areas in public health programmes would help to decrease the number of unwanted pregnancies.

**Alis & White M. (2005)** “Family Planning practices among currently married Women in Khairpur District, Sindh, Pakistan”, among 300 currently married women with cross-sectional survey by stratified cluster sampling. The result shows that 62% were illiterate, 45% mothers were in the age group of 25 to 34 years, exposure to FP messages was by TV (66%). The prevalence of FP methods was 27%, Oral pills were the predominant method used (32%). Regarding socio-demographic factors, more
than four living children and husband’s approval was the main factor associated with the use of FP methods. They concluded that prevalence of FP is still low in upper Sindh area. In addition to continuous use of mass media (TV and Radio), involvement of males should be incorporated in future FP initiatives.

Kalam Abdul (2005) in his article, “Mission possible” explained that “Our focus should be on empowerment through awareness and education on mainly: contraception. Failure to provide appropriate and timely intervention misses the opportunity reducing the unwanted outcomes of unintended pregnancy; it is an opportunity we should not miss. If we have to deliver results, we need reproductive rate of one by the year 2010, which is equivalent to achieving a two-child norm. Hence creating awareness on contraceptive use among the eligible couples is an important task to achieve birth rate of 21 per thousand and adopt small family norm as a way of life. Family planning work is of utmost importance to prevent population explosion.

Baluiah D. et al (2005) “Determinants of spacing contraceptive use among the 2,687 couples in Mumbai: a male perspective”. Data obtained by semi structured interviews schedule. Results have shown from the 2,687 couples 1,395 (51.9%) were using one or the other method of spacing contraceptives and 1,292 (48.1%) was not using any method at the time of survey. Male participation in contraceptive use was 23% (condom and withdrawal). The result indicates that the use of spacing contraceptive methods was significantly higher among those couples where the men desired for one or two children. They had knowledge of five or more contraceptive methods & discussed with their wives obtaining FP information, spacing and permanent contraceptive methods. Age, income, desired number of children,
knowledge of a great number of contraceptive methods, inter-spouse communication regarding obtaining family planning information. Spacing and permanent method were found to be strong predictors in the use of spacing contraceptive methods. They suggested that intervention programmes were necessary to promote a small family norm, increasing the number of contraceptive choices available and encouraging inter-spouse communication. Hence, policy makers and programme managers should encourage interventions in this direction targeting couples to enhance the use of spacing contraceptive methods.

**Calabretto H. (2005)** “Emergency Contraception: A qualitative Study of young women’s expressions” quoted that young women aged 13, interviewed individually about their personal experience in relation to the use of EC. Some women had positive experiences; however many of their experiences were negative and reflected difficulties in, access and availability of EC, as well as poor provider attitudes. Positive experiences generally occurred where services were responsive to the need of young people or when a provider was well known to the young women. The author concluded that to optimize growing womens’ experiences of EC use, a number of strategies are needed to be implemented.

These include improvement of information about EC for young women and to their partners; for health professionals; and for the community to include strategies in order to improve access to EC.

**Abbott J. et al (2004)** conducted a study,” Emergency contraception: what do our patients know?” among 158 women aged 18-45yrs with the objectives to measure knowledge, attitude, practice and perceived needs about EC. The result shows that among all respondents, 122 (77%) had heard of EC pills as way of preventing
pregnancy after unprotected intercourse. Of these respondents ½(half) did not have enough knowledge to use EC pills effectively. 57% of women were willing to use EC in future, 16 women said they would consider a change in regular contraception to EC pills if they are widely available. They concluded that there is a broad acceptance of EC pills to prevent pregnancy, but knowledge of availability; timing and proper use is limited. As EC pills are safe, effective and low-cost, primary preventive and emergency care, intervention is needed, so, the information about their use should be made available to emergency departments and to patients.

_Eisengerg M. E. et al (2004)_ “Parent’s belief about condoms and oral pill: Are they medically accurate?” A study among 1069 parents aged 13 to 17 years was conducted. The result shows that fathers tended to have more knowledge on condoms and mothers on oral pills. With the above result, the researchers suggested of campaigns encouraging parents to talk and provide medically accurate information on the effectiveness, safety and usability of condoms and the pills.

_Trucessel J. et al (2004)_ in their article “The role of Emergency contraception” said that “EC is an under used therapeutic option for women in the event of unprotected sexual intercourse. Most patients will experience prevention of pregnancy, providing they follow the suggested treatment carefully. They recommended that Patient education is paramount in the reduction of unintended pregnancies.

_Herndon E. J. & Ziemon M. (2004)_ in their article “New contraceptive option” discussed that almost one-half of pregnancies in the United States are unintended. Primary reasons for the high rate of unplanned pregnancy include dissatisfaction with or underuse of effective contraceptive methods and poor
compliance with contraceptive methods that require daily adherence. They suggested that in providing counselling about contraception, the physician should consider the women’s preference and determine the likelihood of adherence to the regimen. In case of contraceptive failure, EC is effective.

Nagase T. et al (2003) in their article, “Obstacle to modern contraceptive use among 205 married women in southern urban Maldives”, described that there were various obstacles like the husband’s disapproval of modern contraceptives use, poor communication between wife and husband about the method, health concern and fear of side effects, the wife’s refusal to use modern contraceptive and dissatisfaction with sexual sensation while using contraceptives. By this result, the researchers suggested that promotion of modern contraceptive use made by enhancing male involvement in reproductive health activities including a male directed program, health promoting interventions to remove perceived barriers to modern contraceptives use and finally, enhancing the counselling service program to help women to choose appropriate contraceptive methods and use them consistently and correctly.

A. Rorbye et al (2002) in their study on “Emergency Contraception: Knowledge and use among 1514 Danish women requesting termination of pregnancy” shows that the response rate was (83.7%). They found adequate Knowledge (44.7%) in younger, better educated and more often single, nullipara and users of contraception. Emergency Contraception used by 6.6% those who are pregnant and 24.1% had used it previously. They concluded that the general Knowledge about Emergency Contraception had not improved significantly during the last few years and there was still need for information about the correct use of Emergency Contraception (EC)
A study by Ottesen S. et al (2002) on “How to improve the use of EC by adolescents” shows the result of condom breakage, lack of compliance in Oral contraception and failure in contraceptive use are the main reasons for using emergency contraception. Insufficient information and low quality of services in emergency could be the important barriers in the use of EC. Therefore, they suggested that practical knowledge and information on EC must be disseminated among the users. Professional training and development of services have to be provided for better access to emergency contraception.

Elbertison C. et al (2000) on “Emergency Contraception: A review of the programmatic and Social Science literature” suggested that there is a need to improve in the existing EC services. It also offers the ideas for designing organization new centers and EC services, where they do not yet exist.

Baveja R. et al (2000) conducted a study among 8077 clients on “Evaluating contraceptive choice through the method-mix approach, An Indian Council of Medical Research (ICMR)”. The majority of women opted for spacing methods; among them the IUD was preferred by 60% of clients, followed by condoms(9%), oral contraceptives(6%) and nor plant (5%), Sterilization, mainly female was accepted by about 17 %. Of the women, illiterate women more often accepted sterilization for about 25% than literate women (15%) did, however, literacy status did not influence the choice of any specific spacing method. They suggested that there is an urgent need to promote the practice of informed choices in the national programme with a variety of contraceptive options, especially, spacing methods for improving contraceptive prevalence and reproductive health in the country.
Kumar R. Singh et al (1999), in their article, “Dynamics of contraceptive use in a rural community of Haryana” with the objectives to study the dynamics of contraceptive use in 3 villages of Haryana with a cross sectional study of 600 married women aged 15-44 years by using semi-structured interview schedule. More than 75% of the respondents were aware about modern contraceptives. 59% of the couples had used contraceptives. Among the 35% of users, the first contraceptive method used was sterilization is 41.3%, condom in 35.6%, IUD in 17.9% and oral pills is 5.1%. At the time of survey 236 (39.9%) were using contraceptives. Most of the current users of about 225 had opted for tubectomy and only a few (4) had accepted vasectomy. Supplies of contraceptives were obtained mainly from Govt. hospitals and sub-health centers. Untoward effects perceived common reasons for discontinuation (37%), desire for more children (32.6%), and failure of the contraceptive method (19.0%). They suggested that counselling and follow-up services should be strengthened, so that contraceptives should be used regularly and make them more effective for longer periods.

Balaiah D. et al (1999) “A contraceptive Knowledge, Attitude& Practice of men in rural Maharashtra” conducted a survey on 3072 married men in Thane District of Maharashtra with special emphasis on investigating the reasons for not accepting male methods. The result shows majority of them not only had no concept of family spacing, but had not even taken any initiative to improve their knowledge or acceptance of condom or vasectomy. Men who were aware of contraceptive methods had little knowledge of their correct use. Of the men, 53.7% had positive views about their role in family planning while 66.2% of men stressed the need to improve the acceptance of male methods by providing knowledge and information through sources such as radio, TV, door to door campaigning and interpersonal communications. 30%
emphasized the need to improve the availability and quality of services. They suggested that there is a pressing need for effective intervention strategies, both at the community and the clinic level, with efficient counselling, motivation and provision of services in rural and remote areas.

*Sarkar N. N. (1999)* wrote in his article “Emergency Contraception”, that emergency contraception means, preventing pregnancy after unprotected sexual intercourse. Some women uses EC, but there are many who do not know much about it. Therefore, he has recommended that user, providers and health professionals made to be educated about this method.

*Greg Damus D.E. (1999)* “Reproductive health: an international perspective”, in his article wrote that the 20th century began approximately with 1.6 billion human beings in the world and with an increase of 96 million people every year, will end over 6 billion people. Unless the world governments and their citizens directly confront this trend, there will be nearly 8 billion by 2015 and over 11 billion by 2025. Thus reproductive health will remain an issue of critical importance for all.

*Blanchard K. (1998)* conducted a study on “Improving women’s access to emergency contraception: Innovative information and service delivery strategies” stated that barriers to widespread use of EC include lack of knowledge on the part of women and providers, lack of support for the method from providers and lack of dedicated product in many countries. They suggested that expanding the scope or number of programmes and introducing them in areas where women do not currently have adequate knowledge or access to EC would ensure that more women would be able to use this method.
**Lindbery C. E. (1997)** “Emergency Contraception: the nurse’s role in providing post coital contraception” discussed that EC refers to pregnancy prevention methods initiated after unprotected sexual intercourse. Research has shown that 75% of the 3.5 million unintended pregnancies that occur in the US, every year, could be prevented through use of EC. Nurses can play an essential role in the distribution of EC as patient educators, advocators and support persons.

**Cullins V. E. & Garcia F. A. (1997)** in their article “Implantable hormonal and emergency contraception” explained that safety and efficacy profiles, have not realized its potential for wide spread use. Therefore, it should be made more widely available and accessible for all.

**2.4 Section D: Effect of education on contraceptive practice**

**Pujari D. Jayashree (2009)** conducted a study on “Effectiveness of planned teaching programme on temporary contraceptive methods” showed that the mean percentage knowledge score was 43.7% during pre test which was increased to 92.9% during post-test and the difference found statistically significant. \( p < 0.05 \).

**Kavanaugh M. L. et al (2008)** conducted a study on “Counselling about the use of EC in the US”, found the result that overall 3% of women reported about counselling and the use of emergency contraception. Researchers emphasized that women should have accurate information about how to access and use emergency contraception.

**Halpern C. T. et al (2008)** conducted a study on “Effectiveness of web-based education on Kenyan” found that there is improved knowledge and attitudes about condom, EC, etc. Researchers suggested that future intervention should focus on
purposeful searching for health information when there is a circumstance of unmet health need.

Gee R. E. et al (2007) conducted a survey about emergency contraception knowledge after a community education campaign reported that there was significant improvement in knowledge on emergency contraception when compared with the previous survey results.

Stiner M. J. (2006) “Communicating contraceptive effectiveness: a randomized controlled trial” to inform a World Health Organization with the objectives to compare three different approaches for increasing clients’ understanding of contraceptive effectiveness among 900 reproductive age women in India and Jamaica. The result shows that knowledge about contraceptive effectiveness was poor. About half of them knew that OCP are more effective than condoms (46%) and IUD are more effective than Injectables (50%). There is significant change in their knowledge after education.

Sondra G. et al (2006) in their study on, “Emergency contraception in Honduras: Knowledge, attitude and practice among urban family planning clients”, reported that awareness towards emergency contraception increased after intervention also stated that the respondents developed positive attitude and concern towards emergency contraception.

Pinar Topsever et al (2006) conducted a study on “counselling and knowledge about contraceptive mode of action among 453 women” reported that prevalence of counselling and correct knowledge about mode of action was 49% and 39.3% respectively. Counselling non barrier method users were significantly more likely to
know the correct mode of action of their chosen method than non counselled. They concluded that use of family planning counselling services in primary health centers should be promoted.

**Ruby Bhatia et al (2006)** “Preference for sex and female sterilization” conducted a retrospective study among 1129 cases of sterilization performed. The study shows the result that 96.63% women accepted female sterilization. Only 3.37% of males opted for No Scalpel Vasectomy. 98.62% women had one or more sons, while only 1.38% of women with only one or more daughters & son accepted sterilization. They suggested that motivation of women in post partum period is suitable for sterilization and intensive drive is needed for motivation to make life worth living for girl child.

**Baksu A. et al (2005)** conducted a study on “change in contraceptive choice and the effect of education on use of contraception at family planning clinic”, Turkey, shows that there was significant increase of method use with condom and pills among the couples were educated than others as well as there was reduction in elective abortions and number of births.

**Margareta Larsson (2004)** conducted a study on “Emergency contraception pill in Sweden: evaluation of an information campaign”, reported that the response rate was 71% which increased to 83% after intervention. Hence, EC users increased from 27% to 31%.

**F. Nii Amooc Dodoo et al (2004)** “Does discussion of FP improve Knowledge of partner’s Attitude towards contraceptives”, the result shows that discussion was
positively associated, that is correct reporting of husband’s approval, but negatively associated with correct reporting of his disapproval.

**Philippines (2004)** conducted a study on “Facilitators Module: Group counselling for promoting modern FP”, shows the result that providers find the holding of several hour-long sessions with couples and individuals to be gratifying and useful. Although time consuming, they could reach more couples at one fixed time and are much more effective in increasing a thorough understanding of how methods are working and the effects they might have.

**De Rose L. F. et al (2004)** “Does discussion of family planning improves knowledge of partners’ attitude towards contraceptives”?, In Kenya, where the approval rate of family planning is 90%, have cost doubt on the assumption that spousal discussion improves knowledge of partners’ attitude towards family planning. The result shows that discussion was positively associated with correct reporting of husbands’ approval towards family planning.

**Wang B. et al (2004)** “Effect of a community based sex education and reproductive health service programme on contraceptive use of unmarried youths in Shangahai”, with the objective to create awareness and counselling to the youths, shows the result that a multifaceted intervention program that provides information and skills as well as counselling and services, appears to have positive influences on contraceptive practices and condom use among unmarried young females and males in sub-urban.

**John M. Musalia (2003)** “Extraconjugal determinants of special communication about family planning in Kenya” reveals that there were 8 children in
1980’s which has declined during early 1990’s. This fertility decline is being experienced because of spousal communication about Family Planning.

Gupta N. (2003) “Association of mass media exposure with FP attitudes and practices in Uganda”, examines the association between multimedia behaviour change communication (BCC) campaigns and women’s and men’s use of and intentions to use modern contraceptives by evaluation survey. The results indicate that exposure to BCC messages was associated with increased contraceptive use and intention to use.

Lisa K. Johnson et al (2003) “Patients’ satisfaction and the impact of written material about post-partum contraceptive decisions”, among 109 aged 15 to 45 years with 53 control and 56 intervention group, shows the result that post-partum distribution of written material about contraception options increase women’s ability to make an informed decision regarding birth control.

Thomos T. Kane et al (2003) “The impact of a Family Planning multimedia campaign in Bamaka, Mali, discussed that, the use of traditional media such as songs, music, plays and proverbs using local languages in familiar settings is one strategy for reaching segments of some populations to those are illiterate or closely tied to certain beliefs and practices. They showed that the campaign improves the knowledge and practicing of contraceptive methods.

Babaee G. et al (2003) conducted a study on “Investigating the knowledge, attitude and its relationship with the mean of using emergency contraception” among 250 women referred to health centre. The result shows that majority had not used EC. Just 5.2% (13 women) had used this method and 8.31% had knowledge and information about EC. There was a significant co-relation between knowledge about
and use of this method ($p = 0.0001$). They concluded that although the users of this method were more knowledgeable about EC than non-users, a majority of subjects (76.57%) had a positive attitude towards EC, however there was not a significant correlation between positive attitude and use of EC ($p = 0.184$).

_Mine Y. & Gulsen V. (2002)_ in their study on “reason for using traditional contraceptive methods and the role of the nurse in family planning” reported that before the education and counselling 53.3% of women were found to be using an effective method and of which 49.4% women stopped because of health problems, whereas after education the result showed that 48.5% of women started to use an effective method. Most important point was following the education programme, 49.5% of women who stopped using an effective method restarted to use.

_Bamnezai Geeta (2001) “Impact of counselling service in Family Planning-An assessment of counselling services in Delhi CGHS hospital”_ with the objective to assess the impact on the family planning knowledge, attitude and behaviour of reproductive couples who have been counselled in family planning and to ascertain changes in the knowledge, attitude and level of utilization of family services. The researcher presented the result that about 70% of the counselled respondents were aware of all modern contraceptives as compared to 67% of non-counselled. The acceptance of FP methods is higher among counselled couples and leads to an increase in knowledge, attitude and practice among counselled couples compared to non-counselling couples. There is a strong association observed between counselling and contraceptive acceptance of Cu-T i.e 90.4% (counselling) and 78% in non counselled. 47% in counselled intend to use contraceptive methods in future as compared to 44.1% on non-counselled.
Little P. et al (1998) conducted a study on “Effect of educational leaflets and knowledge of contraception in women taking the combined oral contraceptive pills: Randomized trial”, among 636 women aged 18-45 years taking combined oral contraceptive pills by postal study. The result shows that 523 women returned the questionnaire (response rate is 82 percentage). Knowledge of contraception with no intervention was low with only 10 (12%) women knowing all the pill rules. Educational intervention had a highly significant effect on knowing of: Factors causing pill failure (22%), subsequent action (21%); Emergency contraception (24%), and the entire pill rules (22%), (p<0.01 in all cases). Improvement in the knowledge of all the pill rules occurred with provision of the summary leaflet (28%) knew all the rules. They concluded that women attending for checkups for repeated prescription of the contraceptive pills should be provided with educational leaflets on contraception or asked relevant questions to help improve their knowledge of contraception. As inadequate knowledge about combined oral contraceptive is a major contributor to method failure.

2.5 Section E: Effectiveness of Video Assisted teaching programme

Prema A. Saridha (2009) conducted a study on “Effectiveness of need based video assisted teaching module on temporary methods of contraception among girl students” showed that the mean percentage knowledge score was 12.08% whereas it was increased to 63.26% after video teaching with 51.18% of difference in mean percentage knowledge score. She concluded that VATM was effective.

Sarojini S. (2009) conducted a study on “Effectiveness of lectur cum demonstration with VATM for Antenatal examination” reported that the mean post test score was 27.38 for lecture cum demonstration and 36.15 for VATM. She
concluded that effectiveness of VATM was higher than usual lecture cum demonstration method.

*Trivedi Himanshu (2009)* conducted a study on “Effectiveness of VATM on management of LBW babies related to knowledge on practice among health worker” reported that the mean percentage knowledge score was 39.23% whereas it was increased to 71.12% during post test with the difference of 31.23% which statistically significant (p<0.05) concluded that VATM was effective.

*Sivabalan T. (2009)* on “Efficacy of compact disc in abdominal surgery” reported that the mean post test knowledge score (90.9%) of experimental group was found to be significantly higher than the post test knowledge score (36.75%) in the control group in abdominal surgery patients on knowledge and practice of breathing exercises. He had concluded that effectiveness of compact disc has increased knowledge.

*Sally and Andrew (2006)* in their study on using video clips to enhance the self efficacy of nursing students towards dealing with difficult situations and suggested that the video clip materials are effective for enhancing nursing students towards dealing with difficult situations and to effectively communicate with patients.

*Lare M. et al (2006)* conducted a study using online video clips to enhance self-efficiency towards dealing with difficulty and observed that through video clips that show students coping with adverse situations provide an effective teaching approach for enhancing self-efficiency.

*Nephoiz L. Mcanse (2006)* conducted a study on “Interactive video instruction increased efficiency in cognitive learning and nursing education programmes”. The
study findings revealed that interactive video device instruction for teaching therapeutic communication skills and permitting an increase in quality of teaching.

Barkaras et al (2006) conducted a study on “Comparison of effectiveness of interactive video disc versus lecture demonstration instruction” had revealed that interactive videodisc instruction was valuable than the lecture demonstration in teaching a particular psychomotor skill.

American Heart Association (2005) conducted controlled randomized trials among nurses and proved that a brief video assisted instruction programme can produce better skill performance than traditional learning. They added that the use of audiovisual prompts during motor skill acquisition training improved the nurse’s skilled performance during or immediately after training.

Mc Conville et al (2005) conducted the study on “Using on-line video clips to enhance self-efficiency towards dealing with difficult situation among nursing students” had revealed that using video clips shows increased enhancing self efficiency.

Deamics (2004) conducted the study on “Interactive video disc instruction in alternative method for learning and performing a critical nursing skill” and study findings revealed that using on IVDI as an effective, self paced, independent study method for learning psychomotor skill.

Mc. Alinton M. et al (2004) in their study on “Repurposing video discs for interactive video improvements” stated that more nurses with baccalaureate degrees scored above the median for the interactive video instruction programme than those with associate degrees or diplomas. Registered nurses with more than 5 yrs of
experience also expressed willingness to apply the concept of audit improvement to their daily patient care to activate and to use computer for learning.

**Phipps et al (2003)** stated that most of the patients only retain less than 30% of what is taught immediately after the teaching session. Nursing intervention to increase patient and family retention include repetition and review of content using multi sensory channel videos and demonstration.

**Victoria Mason et al (2003)** “The use of video information in obtaining consent for female sterilization: A randomized Study”, had been carried out among 31 mothers requesting for sterilization shows the result that women receiving video information as well as the standard consultation had significantly higher knowledge scores compared with women only receiving the conventional consultation. Researchers suggested that videos are a reliable and consistent method of delivering information of women regarding family planning methods.

**David V. et al (2003)** conducted a study on evaluating the use of streaming video to support student nurses in the first year life science course and reported that video teaching can contribute support in learning.

**Oreman et al (2003)** studied about the effectiveness of focused videotape instruction in general health promotion. It revealed that there was a significant gain in the knowledge among those who viewed the video tape (t=5.43, df=213.p<0.001). The study supports to focus the video instruction as an effective and efficient teaching intervention, for disseminating health information.

**White L. and Geneducean C. (2002)** stated that the level of learning increases when more than one teaching medium is used. When the visual material such as video
tape is used as the teaching method, it has a strong influence on the degree of learning and retention of information.

*Lernzishcheck D. F. et al (2001)* carried out a study on “Evaluation of Asans pre operative patient teaching video in general” which revealed that video tape method of teaching was preferred as the method of effective teaching.

*Heidgerkhen L. E. (2000)* stated that the motion picture is very much life like and can minimize time span and distance. It is an excellent teaching aid. Considerable research on the use of educational motion picture has been done in the past 20 years. Research results show that the educational motion pictures can teach factual materials effectively and can modify motivations, interests, attitudes and opinions.

**SUMMARY**

The literature reviewed in this chapter facilitated the investigator in designing and conducting the study. Indepth study and realization helped a lot in preparing the video teaching module.